REMARKS

I.   Introductory Comments

Claims 1 and 3-7 have been amended herein. Claim 2 has been canceled without prejudice or disclaimer. New claims 12-15 have been added. The amendments do not introduce any new matter into the application. Therefore, claims 1 and 3-15 are pending in the application. Claims 1 and 11 are in independent form.

Applicant respectfully requests favorable reconsideration of the presently pending claims based on the amendments made herein and for the following reasons. Further, Applicant believes that there are also reasons other than those set forth below why the pending claims are patentable, and reserves the right to set forth those reasons, and to argue for the patentability of claims not explicitly addressed herein, in future papers.

II.   Rejection of Claim 2 under 35 U.S.C. §112, Second Paragraph

Claim 2 was rejected under 35 U.S.C. §112, second paragraph as being indefinite. Applicant has canceled claim 2. Therefore, the rejection is obviated.

III.   Rejection of Claims 1-11 under 35 U.S.C. §101

Claims 1-11 were rejected under 35 U.S.C. §101 ("Section 101") as being directed to non-statutory subject matter, in particular a computing architecture comprising software per se. Office Action, page 3. Claim 2 has been canceled and its rejection obviated. Applicant respectfully traverses the Section 101 rejection of claims 1 and 3-11 based on the following.

A. Claims 1 and 3-7

According to the Office Action:

10.   Claim 1 is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a useful, concrete and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

11.   Claims 2, 3, 5, and 6 are dependent claims of claim 1. They do not further produce any tangible results to support the deficiency of claim 1. They are rejected for the same reason.

Office Action, page 4.

Applicant respectfully disagrees at least because the Office has misinterpreted the statutory requirements of Section 101. Section 101 states that "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." On its face, Section 101 does not require that the claimed invention be "tied to a technological art, environment or machine" as asserted by the Examiner. Moreover, the Office does not require a claimed invention to be tied to a technological art. See *Ex Parte Lundgren*, Appeal No. 2003-2088 (BPAI 2005). Accordingly, the Section 101 rejection of claims 1 and 3-11 should be withdrawn at least because the basis for the rejection is simply not supported by the plain language of the statute or by the precedential opinion in *Ex Parte Lundgren*.

Nevertheless, to expedite prosecution of this application, Applicant has amended independent claim 1 to recite:

> 1.   A <u>computing machine having a </u>computing architecture, comprising:
> a base operating system (OS); and
> at least one virtual OS environment within the base OS, the virtual OS environment having a file system and registry which is independent of the base OS.

Emphasis added. Claims 3-7 have been amended to refer to the "computing machine of claim 1" rather than the "computing architecture of claim 1." The amendments made in this regard to claims 1 and 3-7 do not, and are not intended to, narrow or alter the scope of the claims in any way. Rather, the amendments are made solely to clarify the subject matter of the claims with regard to Section 101 as requested by the Office. The amendments are supported by Applicant's original specification. For example, see paragraph 0003 and the preamble of claim 8 of Applicant's specification. It is believed that the amendments address the Examiner's concerns. Therefore, the Section 101 rejection of claims 1 and 3-7 should be reconsidered and withdrawn.

B. Claims 8-11

According to the Office Action:

Claim 8 is the method of claim of claim 1. It is rejected for the same reason as claim 1 above.

Office Action, page 4. Accordingly, the Section 101 rejection of claim 8 and its dependent claims (claims 9-11) should be withdrawn for at least the same reasons described above in relation to claims 1 and 3-7, especially in view of *Ex Parte Lundgren*. Moreover, the rejection of claim 8 under Section 101 overlooks the preamble of claim 8, which recites in part "[a] method of configuring a computer...." Emphasis added. Claim 8 is therefore directed to patentable subject matter. For at least these reasons, the Section 101 rejection of claim 8 and its dependent claims (claims 9-11) should be reconsidered and withdrawn.

IV. Rejection of Claims 1-3, 5-6, and 8 under 35 U.S.C. §102(b)

Claims 1-3, 5-6, and 8 were rejected under 35 U.S.C. §102(b) ("Section 102") as being anticipated by Hall et al., "A Virtual Operating System," pages 495-502 ("Hall"). Claim 2 has been canceled and its rejection obviated. For at least the reasons discussed below, Applicant respectfully traverses the Section 102 rejection of claims 1, 3, 5-6, and 8.

A. Independent Claims 1 and 8

On pages 4-5 of the Office Action, the Examiner asserts:

Hall teaches a computing architecture, comprising:
a base operating system (OS) (single real operating system, page 495 col. 3, page 496 col. 2); and
at least one virtual OS environment (virtual operating system, page 496 col. 2) within the base OS, the virtual OS environment having a file system (file system, p. 497 col. 1 section 4) and registry (inherent for OS) and which is independent of the base OS.

Applicant respectfully disagrees. Claims 1 and 8 include claim elements that are not disclosed in Hall.

1. "the virtual OS environment having a file system and registry which is independent of the base OS"

Claims 1 and 8 recite:

1. A computing machine having a computing architecture, comprising:

a base operating system (OS); and
at least one virtual OS environment within the base OS, <u>the virtual OS environment having a file system and registry which is independent of the base OS</u>.

8.   A method of configuring a computer with a base operating system (OS) having a base OS file system and registry, the method comprising the steps of:
creating at least one virtual OS environment under the base OS, <u>each virtual OS environment having file system and registry locations which are independent of the base OS file system and registry locations</u>.

Emphasis added.

Hall does not disclose "the virtual OS environment having a file system and registry which is independent of the base OS" as recited in claim 1 or "each virtual OS environment having file system and registry locations which are independent of the base OS file system and registry locations" as recited in claim 8. In rejecting these claim elements, the Examiner alleges that Hall, at page 497, col. 1, section 4, discloses "file systems" and that a "registry" is inherent for an operating system. Office Action, page 5. However, even if these assertions are assumed to be accurate for sake of argument, a mere disclosure of "file systems" in Hall and a registry being inherent for as OS, taken alone or together, do not amount to a disclosure of "the virtual OS environment having a file system and registry which is <u>independent of the base OS</u>" as recited in claim 1 or "each virtual OS environment having file system and registry locations which are <u>independent of the base OS file system and registry locations</u>" as recited in claim 8. Emphasis added.

The cited section of Hall states:

To test the approach, a uniform program development environment was installed on several distinct systems. A program development environment consists of resources which assist programmers in the development and maintenance of computer programs, such as text editors, programming language processors, and file systems. The types of system resources with which such a virtual machine is concerned (files, directories, processes, and the user environment) require a general-purpose operating system interface.

Hall, page 497, col. 1, section 4. The reference to "file systems" in this section of Hall does not include any teaching or suggestion that the "file systems" are part of a virtual OS environment or that the file systems are independent of a base OS file system. Rather, the reference merely

describes resources (e.g., a text editor) that are available in a program development environment to assist programmers in the development and maintenance of computer programs. Moreover, the program development environment in the cited section of Hall is used merely to create source code for a virtual operating system, and there is no teaching or suggestion in Hall of the virtual operation system having a file system that is independent of the base OS file system.

In fact, Hall teaches away from "the virtual OS environment having a file system and registry which is <u>independent of the base OS</u>" as recited in claim 1 and "each virtual OS environment having file system and registry locations which are <u>independent of the base OS file system and registry locations</u>" as recited in claim 8. Emphasis added. For instance, the disclosed purpose of the virtual operating system in Hall is to provide a standard interface to a real operating system. Hall, page 496, Fig. 1 and col. 1, first and second paragraphs. In other words, the virtual operating system in Hall is simply a wrapper on top of a real operating system – an interface between a user interface and a real operating system. Hall states, "the emphasis in building a virtual operating system is on the interface presented to the user." Hall, page 496, col. 1, fourth paragraph. As a mere interface on top of a real operating system, there is no need for the virtual operating system of Hall to have a file system or a registry that is independent of the file system of registry of the real operating system. In fact, by focusing on providing a standardized interface to a real operating system, Hall teaches away from such a configuration. Hall, page 495, col. 3, last paragraph.

Moreover, even if a registry is assumed, *arguendo*, to be inherent for an operating system as asserted in the Office Action, this does not amount to a teaching, explicit or inherent, of a virtual OS environment having a registry that is independent of a base OS. The virtual operating system of Hall, as a mere interface to a real operating system, teaches away from an independent registry for the virtual operating system.

For at least these reasons, Hall fails to disclose "the virtual OS environment having a file system and registry which is <u>independent of the base OS</u>" as recited in claim 1 or "each virtual OS environment having file system and registry locations which are <u>independent of the base OS file system and registry locations</u>" as recited in claim 8. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051,

1053 (Fed. Cir. 1987). See M.P.E.P. § 2131. Therefore, the Section 102 rejection of independent claims 1 and 8 should be withdrawn and the claims allowed.

2. "at least one virtual OS environment within the base OS"

Hall also fails to disclose other elements recited in independent claims 1 and 8. For example, Hall fails to disclose "at least one virtual OS environment within the base OS" as recited in claim 1 and "creating at least one virtual OS environment under the base OS" as recited in claim 8. Emphasis added. The Office Action fails to point to any particular teaching in Hall of a virtual OS environment that is within or under a base OS. Moreover, Hall teaches away from these claim elements. For example, Fig. 1 in Hall (page 496 of Hall) shows that the virtual operating system of Hall, as an interface to a real operating system, is on top of a vendor supplied system (i.e., a wrapper for a real operating system). Therefore, Hall fails to disclose "at least one virtual OS environment within the base OS" as recited in claim 1 and "creating at least one virtual OS environment under the base OS" as recited in claim 8. For this independent reason, the Section 102 rejection of independent claims 1 and 8 should be withdrawn and the claims allowed.

B. Dependent Claims 3, 5, and 6

For at least the same reasons presented above, the Section 102 rejection of dependent claims 3, 5, and 6 should be withdrawn and the claims allowed because the claims depend from independent claim 1.

V.   Rejection of Claims 4, 7, and 9-11 under 35 U.S.C. §103(a)

Claims 4, 7, and 9-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hall in view of U.S. Patent No. 6,141,698 ("Krishnan"). However, Krishnan does not cure, nor does the Examiner allege that Krishnan cures, the deficiencies of Hall described above with respect to independent claims 1 and 8. Accordingly, the combination of Hall and Krishnan fails to teach or suggest all claim elements recited in claims 1 and 8, including the claim elements described above with respect to claims 1 and 8. Therefore, the Section 103 rejection of claims 4, 7, and 9-11 should be withdrawn and the claims allowed based on their dependencies from

claim 1 or 8.

Claims 4, 7, and 9-11 also recite independently patentable subject matter. For example, the combination of Hall and Krishnan does not teach or suggest "installing at least one application program under the virtual OS environment; and wherein attempts to access the base OS file system and registry locations are instead redirected to the virtual OS environment file system or registry" as recited in claim 9. In rejecting claim 9, the Examiner relies on Krishnan. More specifically, the Examiner alleges that Krishnan teaches injecting DLLs and points to the Abstract and Figures 2, 3, and 6 of Krishnan. However, there is no teaching or suggestion in Krishnan of injecting a DLL in relation to "installing at least one application program under the virtual OS environment" as recited in claim 11.

Moreover, there is no teaching or suggestion in Hall and Krishnan of "wherein attempts to access the base OS file system and registry locations are instead redirected to the virtual OS environment file system or registry" as recited in claim 11, especially in the context of "installing at least one application program under the virtual OS environment." A simple modification of existing application code using a DLL as disclosed in Krishnan is entirely different from "wherein attempts to access the base OS file system and registry locations are instead redirected to the virtual OS environment file system or registry" as recited in claim 11. Should the Examiner continue to rely on Krishnan to reject claim 9, Applicant respectfully requests that the Examiner specifically explain how the injection of a DLL into existing code could possibly teach or suggest "wherein attempts to access the base OS file system and registry locations are instead redirected to the virtual OS environment file system or registry" as recited in claim 11.

For at least these reasons, the Section 103 rejection of claim 9 should be withdrawn and the claim allowed. Claims 10-11 should also be allowed based on their dependencies from claim 9.

IV. New Claims 12-15

Applicant has added new dependent claims 12-15, which depend directly or indirectly from independent claim 8. The new claims are fully supported by Applicant's original specification. For example, see paragraphs 0022 and 0024 of Applicant's specification. The newly added claims are thought to be patentable over the prior art of record for at least the same reasons given above with respect to independent claim 8. The new claims also recite

independently patentable subject matter. Therefore, examination and allowance of the newly added claims is respectfully requested.

CONCLUSION

All rejections have been addressed. In view of the above, the presently pending claims are believed to be in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested and the Examiner is respectfully requested to pass this application to issue. It is believed that any fees associated with the filing of this paper are identified in an accompanying transmittal. However, if any additional fees are required, they may be charged to Deposit Account 50-3583, in the name of AdvantEdge Law Group, LLC, under order number 1015.1001. To the extent necessary, a petition for extension of time under 37 C.F.R. 1.136(a) is hereby made, the fee for which should be charged against the aforementioned account.

Respectfully submitted,

Dated: _____   By__/Jeffrey R. Jeppsen/_____

L. Eric Gardanier
   Reg. No.: 40,617
Jeffrey R. Jeppsen
   Reg. No.: 53,072
Attorneys for Applicant
Customer No.: 53124